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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/072,549	05/05/1998	LESTER F. LUDWIG	COLB001/22US	6658

23493 7590 09/25/2002

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EXAMINER

DINH, DUNG C

ART UNIT	PAPER NUMBER
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2153

DATE MAILED: 09/25/2002

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Paper No. 37

Application Number: 09/072,549  
Filing Date: May 05, 1998  
Appellant(s): LUDWIG ET AL.

Frank L. Bernstein  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 7/16/2002

**(1) Real Party in Interest**

A statement identifying the real party in interest is  
contained in the brief.

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**(2) *Related Appeals and Interferences***

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

**(4) *Status of Amendments After Final***

No amendment after final has been filed.

**(5) *Summary of Invention***

The summary of invention contained in the brief is deficient because the assertion that "previously, in order to provide high quality color video, it was necessary to use other media, such as coaxial cable, to transmit the color video signals" is not in the disclosure as originally filed.

The only one paragraph in the disclosure directed to high-quality, NTSC standard (i.e. "TV quality") video is quoted here:

"In the preferred embodiment, it has been found particularly advantageous to provide the above-described video at standard NTSC-quality TV performance (i.e., 30 frames per second at 640.times.480 pixels per frame and the equivalent of 24 bits of color per pixel) with accompanying high-fidelity audio (typically between 7 and 15 KHz). For example, FIG. 2A illustrates a CMW screen containing live, full-motion

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video of three conference participants, while FIG. 2B illustrates data shared and annotated by those conferees (lower left window)."

The disclosure merely recites a desire to have "TV quality" video. There is no disclosure of a recognition that there was a problem in the art in transmitting "TV quality" video over UTP nor any disclosure of how applicant had solved this problem.

**(6) Issues**

The appellant's statement of the issues in the brief is substantially correct. The changes are as follows:

6. Does the present application provide adequate disclosure under 35 USC 112 1<sup>st</sup> paragraph to enable one skill in the art, at the time of the invention, to transmit "TV quality" video signal over UTP without undue experimentation?

**(7) Grouping of Claims**

Appellant's brief includes a statement that claims (1-5, 7-11, 21-25, and 27-31) and (12-15 and 17-20) do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

**(8) Claims Appealed**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(9) Prior Art of Record**

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4,005,265                      Verhoeckx et al.                      1-1977

4,847,829                      Tompkins et al.                      7-1989

Ramanathan et al. "Optimal Communication Architecture for  
Multimedia Conferencing in Distributed System"

Rangan et al. "Software Architecture for Integration of Video  
Services in the Etherphone System"

Stefik et al. "Beyond the Chalkboard: Computer Support for  
Collaboration and Problem Solving in Meetings"

**(10) Grounds of Rejection**

All pending claims are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for transmission of a video signal over UTP, does not reasonably provide enablement for transmitting "TV-quality" video over UTP for reasons as discussed in the respond to Applicant's argument above. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims.

**Claim Rejections - 35 USC § 103**

Claims 1, 12-14, 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Verhoeckx et al. US patent 4,005,265.

As per claim 1, Verhoeckx teaches a video communication system comprising:

at least one analog video-signal source [abstract line 6];

at least one video display device [apparent];

at least one control communication component configured

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to produce digital control-signals [abstract line 5 - signaling signals];

an unshielded twisted pair of wires [telephone wire]

defining a UTP communication path [col.20 line 20+],

arranged for video-signal transportation,

wherein the system is configured to

multiplex analog video-signals originate at one of the video-signal sources with digital controls from of the control communication component [lines 19-27 'via a single pair of cable'];

transmit the multiplexed signals along the UTP communication path to the at least one video display devices [apparent];

use the control signals to control reproduction of video images, based on the video signals, on the one of the video displays [col.5 lines 17-35].

Verhoeckx teaches the color [col.3 line 9] video images is reproduced at TV quality [col.7 line 32: 25Hz].

Verhoeckx does not teach the UTP wire being included as part of a computer network. Verhoeckx teaches using the existing UTP wire of a telephone network. The "computer network" as recited in the claim is merely nominal recitation. There is no functional relationship tying the elements of the claims to the "computer network". The recited elements would function exactly the same way over a UTP path separate from that of a "computer network". Integrating the video UTP path with an existing UTP computer network path would have been a matter of economic. It would have been obvious for one of ordinary skill in the art to apply Verhoeckx teaching in a computer

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network because it would have enabled video transmission over existing paths and reduced the need to run new wires.

As per claims 12 and 21, they are rejected under similar rationale as for claim 1 above,

As per claims 13 and 14, Verhoeckx teaches multiplexing the audio and switching signal onto the UTP communication path [col.3 lines 19-27].

Claims 21-25, 1-5, 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tompkins et al. US patent 4,847,829 and further in view of Verhoeckx et al US patent 4,005,265.

As per claim 21, Tompkins teaches

A video communication system for operation with an infrastructure including

at least one analog video-signal source [fig.2 camera];

at least one video display device [fig.2 view finder 14]; and

coaxial wire defining a communication path arranged for video signal transportation [col.3 lines 10-20],

the system comprising:

(a) at least one control communication component [col.2 line 67 'controller'] configured to, produce digital control-signals [line 57,68 'data communication']; and

wherein the system is configured to

(i) multiplex [col.3 lines 10-28]

(1) analog video-signals,

originating at a video-signal source,

(2) with digital control-signals

from one of the control communication components,

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(ii) transmit the multiplexed signals

- (1) along the communication path;
- (2) to at least one of the video display devices;

Tompkins does not specifically teach a computer network including unshielded twisted pair communication path arranged for transmission of the video. Tompkins preferred embodiment uses coaxial cable [col.3 lines 10-20]. Verhoeckx teaches transmission of video signal over existing twisted pair wire to save cost [col.1 lines 20-25]. Hence, it would have been obvious for one of ordinary skill in the art at the time of the invention to combine the teaching of Verhoeckx with Tompkins to enable transmission of video conference signal over twisted pair instead of coaxial cable because it would have reduces cost. Verhoeckx teaches using digital control signal to control reproduction of video images at one of the video display devices [Verhoeckx col.3 lines 18-27].

Tompkins teaching using NTSC format. Hence it is apparent that video is color at TV quality.

Verhoeckx does not teach using the UTP path of an existing computer network. Verhoeckx uses the existing UTP wire of a telephone network. The "computer network" as recited in the claim is merely nominal recitation. There is no functional relationship tying the elements of the claims to the "computer network". The recited elements would function exactly the same way over a UTP path separate from that of a "computer network". Hence, integrating the video UTP path with an existing UTP computer network path would have been a matter of economic. It would have been obvious for one of ordinary skill in the art to apply Tompkins teaching to transmit over UTP wire of a computer network because it would have enabled video transmission over existing paths and reduced the need to run new wires.



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As per claim 22, Tompkins teaches multiplexing analog audio onto the communication path [col.3 lines 10-20].

As per claim 23, Tompkins teaches controlling a switch to route the multiplexed signal along the communication path [col.3 lines 29-42].

As per claim 24, Tompkins teaches a server controlling the switch [col.3 lines 29-42 "network master"].

As per claim 25, it is inherent in the operation of Tompkins teaching that audio/video from a first station is configured to reproduce at a second workstation.

As per claims 1-5, and 12-15, they are rejected under similar rationale as for claims 21-25 above.

**Claims 27, 7, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tompkins & Verhoeckx et al and further in view of Ramanathan "Optimal communication Architectures for Multimedia Conferencing in Distributed Systems".**

As per claim 27, Tompkins does teach combining video images to produce a mosaic image. Tompkins only enable one video source to be display at a time. Ramanathan teaches to create mosaic video image to reduce bandwidth to enable participant to see multiple video stream simultaneously in a teleconference system. It would have been obvious for one of ordinary skill in the art at the time of the invention to provide mosaic creation means with Tompkins system because it would have enable the participant to see more than one of the other participants in the conference and enable better interaction of the participants.

As per claims 7 and 17, they are rejected under similar rationale as for claim 27 above.

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Claims 28, 8, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tompkins & Verhoeckx & Ramanathan et al and further in view of Rangan et al. "Software Architecture for Integration of Video Services in the Etherphone System".

As per claim 28, Tompkins does not teach a graphical user interface to enable selection of a user and the conference type. It is known in the art to provide selection of user and conference type [see Rangan et al.]. It would have been obvious for one of ordinary skill in the art to provide graphical interface for the selection of user and conference type because it would have enable a user friendly and flexible initiation of a conference call.

As per claims 8 and 18, they are rejected under similar rationale as for claim 28 above.

Claims 29-31, 9-11, 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tompkins & Verhoeckx & Ramanathan et al and further in view of Stefik et al. "Beyond the Chalkboard: Computer Support for Collaboration and Problem Solving in Meetings".

As per claim 29, Tompkins does not specifically disclose a data conferencing along with the audio/video conferencing. Tompkins discloses that the system is capable of transmitting baseband data signals [col.6 lines 40-63] and can function in conjunction with standard data network (LAN). It is known at the time of the invention to provide data conferencing for collaboration and problem sharing over a data network [see Stefik et al.]. It would have been obvious for one of ordinary skill in the art at the time of the invention to provide a data collaboration tool with Tompkins system because it

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would have enable the user to collaborate and share data while using the audio/video conferencing.

As per claim 30, it would have been obvious for one of ordinary skill in the art to have the data conferencing signal and video display on separate windows on the display device because it would have enable the user to have multiple view simultaneously. At the time of the present invention, it is known to have Operating System (e.g. Microsoft Windows, X-window, etc.) with built in capability for displaying multiple application windows. Hence, the user of this workstation inherently has the capability for displaying the data conferencing and audio/video conferencing in separate windows.

As per claim 31, it is apparent that the system as modified would display the data conference signal interactively at least two display devices [at the initiator and at least one other receiver].

As per claims 9-11, and 19-20, they are rejected under similar rationales as for claims 29-31 above.

#### **(11) Response to Argument**

Regarding Issue 1, Applicant argued the examiner does not give weight to the computer network. The examiner did address the computer network in the obvious rationale to use the computer network's existing UTP wire to save cost.

As per the argument regarding reading the term of the claim in light of the specification. The claim is not written in

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means plus function language. Hence, the terms of the claim are open to their broadest interpretations.

As per the argument regarding "TV quality" over UTP, Applicant presented detail analysis of how the prior art does not enable for this transmission. The argument is not persuasive because Applicant own disclosure merely recites a desire to have "TV quality" video. There is no disclosure of a recognition that there was a problem in the art in transmitting "TV quality" video over UTP nor any disclosure of how applicant had solved this problem. So clearly the issue here is whether it would have been obvious to provide "TV quality" video - not how, technologically, to transmit "TV quality" video over UTP wires. It would have been obvious for one of ordinary skill in the art to provide the best possible video and audio quality because it would have improved the user experience while conferencing.

Regarding Issue 3, 4, and 5, the arguments again directed to the technical aspect of transmitting "TV quality" video transmission over UTP. As to issue 1 above, applicant own specification never disclosed any detail regarding the technical innovation that required to implement this transmission. Therefore, the real issue is whether it would have been obvious

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for one of ordinary skill in the art to provide "TV quality" video in video conferencing.


As per the argument concerning the computer network with UTP wiring. It is well known in the art to use UTP wiring for local area network. The reference clearly teaches providing video signal over UTP wires. The examiner addressed the obviousness for using existing computer network's UTP wire under 35 USC 103 and provided rationale for it in the rejection. Therefore the rejection is proper.

Regarding Issue 6, all the citations to the specification provided by Applicant merely show a very generic view of the components in the videoconferencing system and the paths that data, video and audio signals are flowing through the system. The disclosure and the drawings clearly lack any specific teaching on how transmission of "TV quality" video signal over UTP wiring is achieved. Applicant disclosed no more than a desire to have "TV quality" video.

For the above reasons, it is believed that the rejections should be sustained.

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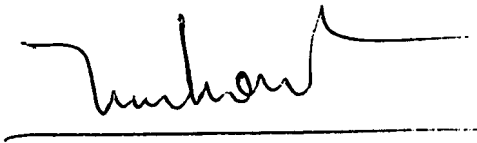
Respectfully submitted,



Dung Dinh  
Primary Examiner  
Art Unit 2153

September 23, 2002

Conferees



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PRIMARY EXAMINER

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